Neo-Ray

DESCRIPTION

The Define series by Neo-Ray characterizes the ultimate in minimalist simplicity by providing clean, uniform lines of illumination in virtually any architectural environment. Powered by Eaton's most advanced linear LED technology, the Define series delivers outstanding efficacy in a variety of profile widths. 1″, 2″, 3″, 4″ and 5″ luminaire widths are all specifiable to the nearest inch in length and can be fitted with standard flush, asymmetric flush, regressed and drop lensing. In wall corners and wall to ceiling transitions can all be ordered as standard components and blend seamlessly into the most complex architectural spaces. Custom transitions are also available. Robust construction and adaptable, modular components make installation simple and ensure laser straight runs.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Housing trim extruded from 6063 aluminum. Nominal 2' -12' illuminated sections. Used in run configuration and/or individual fixtures. All components are RoHs compliant.

Lens
Snap in lens available in flush and drop lens profiles. Lens end caps allow for ease of installation and eliminate light leak.

Finish
Fixture housing trims are high reflective white using electrostatically applied polyester powder coat paint.

Mounting
Recessed.

Electrical
Long-life LED system coupled with electrical driver to deliver optimal performance. LED's are available in 2700K, 3000K, 3500K or 4000K with a typical CRI ≤ 85. Projected life is 131,000 hours at L70. Electronic drivers are available for 120-277V applications. Fixtures and electrical components certified to UL and cUL standards. Fixtures are damp location listed and IC rated. For Chicago plenum, specify CP in fixture options.

Controls
Equipped standard with a 0-10V continuous dimming driver compatible with most standard dimming devices (refer to website for specific compatibility reference). Combine with FifthLight DALI and other energy saving products like sensors, daylighting controls and building management systems to maximize energy savings.

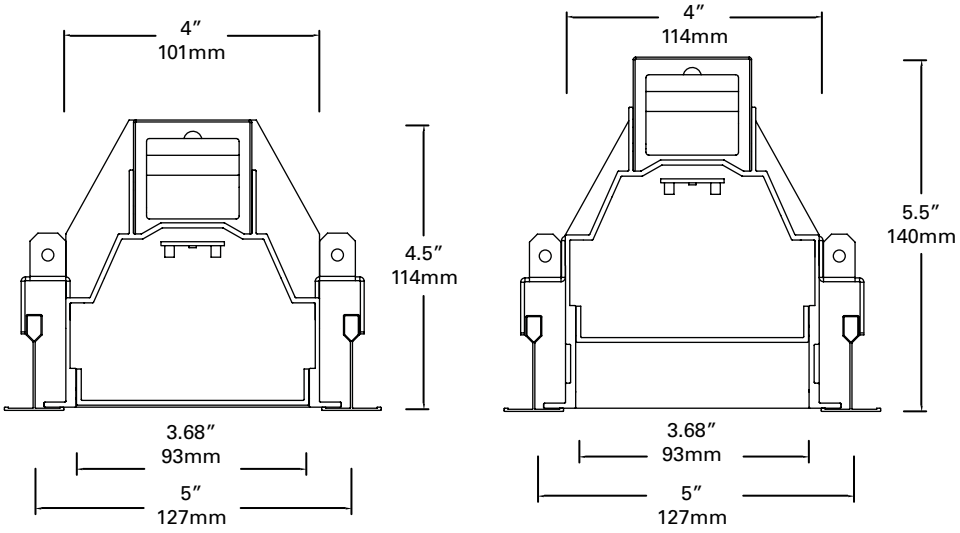
Warranty
Five year warranty.

DEFINE 4

LED

Recessed
Direct

cULus – 1598
Damp Location Listed
LM79/LM80 Compliant
ROHS Compliant
Lumawatt Pro Wireless



powered by fifthlight technology

ORDERING INFORMATION

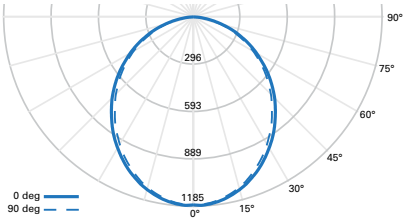
Sample Number: S124-DR-2-35-ETG-0048-1-U-DD-1-W

Series	Light Distribution	Light Level[1]	CCT	Celing Type[2]	Length[3]
S124 = Define 4	**-DR** = Direct Recessed	**-LO** = Light Level LO (1437 Lms @ 13.6 W) (359 Lumens per ft @ 3.4 W)	**-27** = 2700K	**-ETG** = 15/16″ T-Grid	**-0024** = 2′ Individual[4]
QS-S124 = Define 4 Quick Ship	**-RDR** = Regressed Direct Recessed	**-1** = Light Level 1 (2918 Lms @ 27.9 W) (729 Lumens per ft @ 7 W)	**-30** = 3000K	**-FTG** = 9/16″ T-Grid	**-0036** = 3′ Individual[4]
		-2 = Light Level 2 (4136 Lms @ 42.6 W) (1034 Lumens per ft @ 10.7 W)	**-35** = 3500K	**-STG** = 9/16″ Slot T-Grid	**-0048** = 4′ Individual
		-LC____ = Custom Lm/Ft[1]	**-40** = 4000K	**-ETT** = 15/16″ Tegular T-Grid	**-0072** = 6′ Individual
		See page 2 for lumen output		**-FTT** = 9/16″ Tegular T-Grid	**-0096** = 8′ Individual
				-GYP = Gypsum board	**-0144** = 12′ Individual
				-FSR = "Flangeless" Gypsum Board	**-XXXX** = Configurable Run[5]
				-FES = "Finished" Extruded Side	

Circuiting	Voltage	Integral LED Driver	Emergency Options	Options[9]	Shielding	Color
-1 = Single Circuit	**-1** = 120V	**-ED** = Non-Dimming	**-B** = Battery Pack[8]	**-CP** = Chicago Plenum	**-1** = Satin Flush Diffuser[11]	**-W** = Matte White
-2 = Dual Circuit	**-2** = 277V	**-DD** = 0-10 Volt Dimming, 10%	**-E** = Emergency	**-SVPD1** = Integrated Sensor	**-3** = Asymmetric Flush Optic[10]	**-S** = Silver
	-U = Univ 120V-277V	**-HCD** = 0-10 Volt Dimming, 1%	**-T** = Transfer Switch	**-LWIPD1** = Lumawatt Pro Wireless Integral Sensor[12]	**-4** = Satin Drop Diffuser	**-B** = Black
	-3 = 347V[6]	**-5L** = DALI Dimming[7]				**-C** = Custom Color
		-LUE = Lutron A-Series w/eco sys[13]				
		-LUL = Lutron A-Series w/3W dim[13]				

Grey bar denotes available Quick ship options.

All data certified to LM-79 standards in a NAVLAB approved testing facility



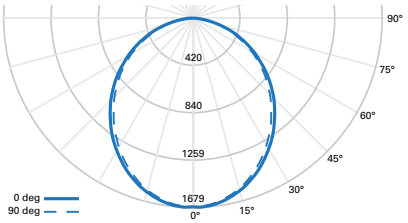
FILE NAME: S124-DR-1-35-ETG-0048-1-U-DD-1-W
CCT: 3500K
LUMENS: 2918 Lms
WATTS: 27.9 W
LPW: 104 LPW
TEST NUMBER: P29680

ZONAL LUMENS SUMMARY

Zone	Lumens	% Fixture
0°-30°	875	30.0
0°-40°	1395	47.8
0°-60°	2356	80.7
0°-90°	2918	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45	8786	8457	8128
55	8163	7788	7476
65	7456	7054	6778
75	6261	5880	5707
85	4519	4314	4211



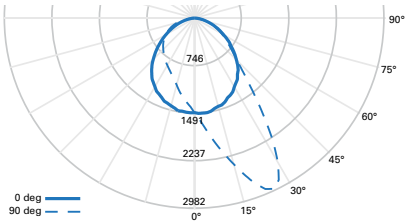
FILE NAME: S124-DR-2-35-ETG-0048-1-U-DD-1-W
CCT: 3500K
LUMENS: 4135 Lms
WATTS: 42.6 W
LPW: 97 LPW
TEST NUMBER: P29682

ZONAL LUMENS SUMMARY

Zone	Lumens	% Fixture
0°-30°	1240	30.0
0°-40°	1977	47.8
0°-60°	3339	80.7
0°-90°	4135	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45	12450	11984	11517
55	11567	11036	10593
65	10566	9996	9604
75	8872	8332	8087
85	6399	6112	5968



FILE NAME: S124-DR-2-35-ETG-0048-1-U-DD-3-W
CCT: 3500K
LUMENS: 4409 Lms
WATTS: 43 W
LPW: 103 LPW
TEST NUMBER: G2-16-1199-1

ZONAL LUMENS SUMMARY

Zone	Lumens	% Fixture
0°-30°	1356	31
0°-40°	2237	51
0°-60°	3661	83
0°-90°	4409	100

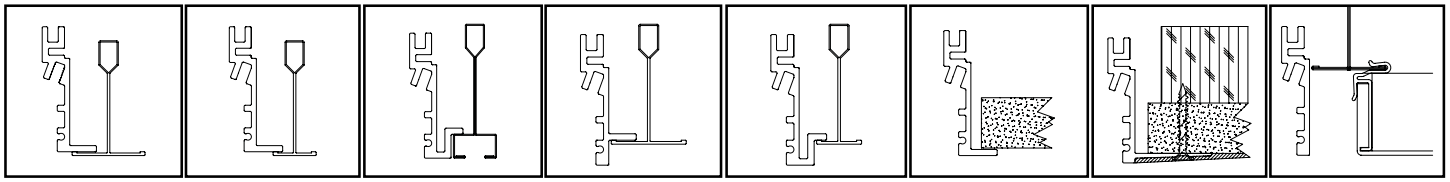
CANDELA DISTRIBUTION (CD)

Vertical Angle	0°	90°	180°	270°
0	1497	1497	1497	1497
10	1497	2041	1490	1225
20	1411	2780	1401	990
25	1344	2982	1328	921
30	1259	2635	1254	862
40	1074	1318	1055	753
50	803	752	787	648
60	534	498	521	523
70	303	285	293	379
80	113	107	103	180
90	0	0	0	0

LUMEN MAINTENANCE

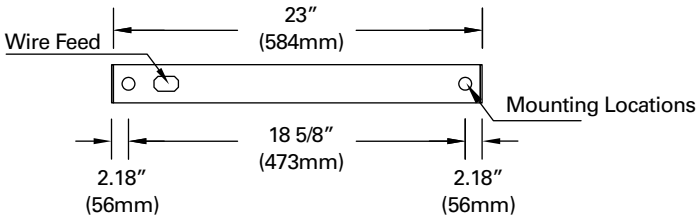
Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
25°C	84.29%	131,000

Extruded Trim Flange Details - Refer to submittal drawings for detailed flange information - for additional options consult factory.

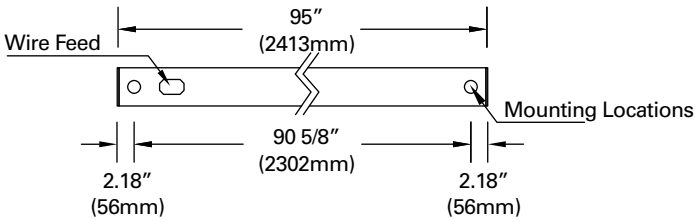


ETG 15/16″ T-Grid | FTG 9/16″ T-Grid | STG Slotted T-Grid | ETT 15/16″ Tegular T-Grid | FTT 9/16″ Tegular T-Grid | GYP Gypsum Board | FSR “Flangeless” Gypsum Board | FES Finished Extruded Side

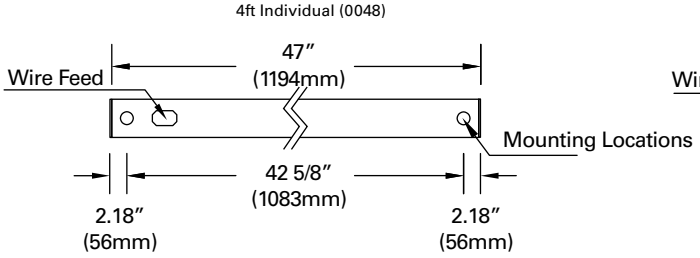
2ft Individual (0024)



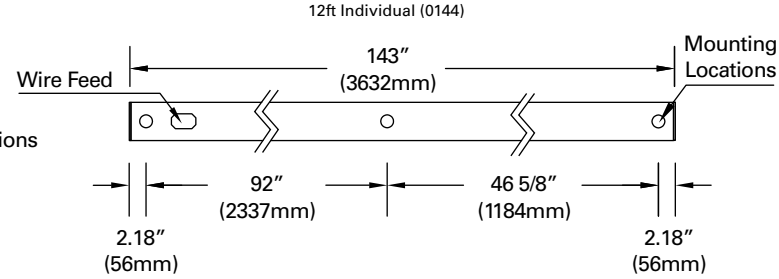
8ft Individual (0096)



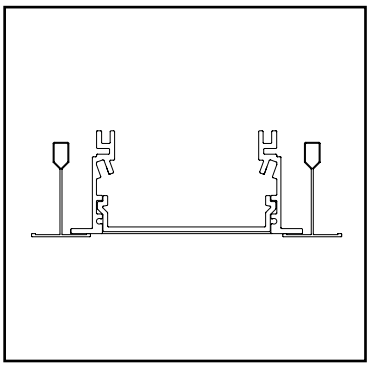
4ft Individual (0048)



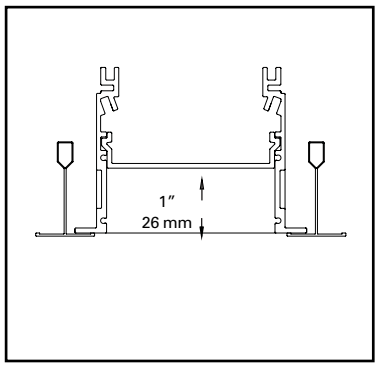
12ft Individual (0144)



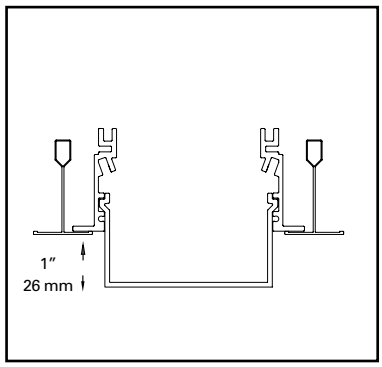
LENS DETAIL



Satin Flush Diffuser
Asymmetric Flush Diffuser

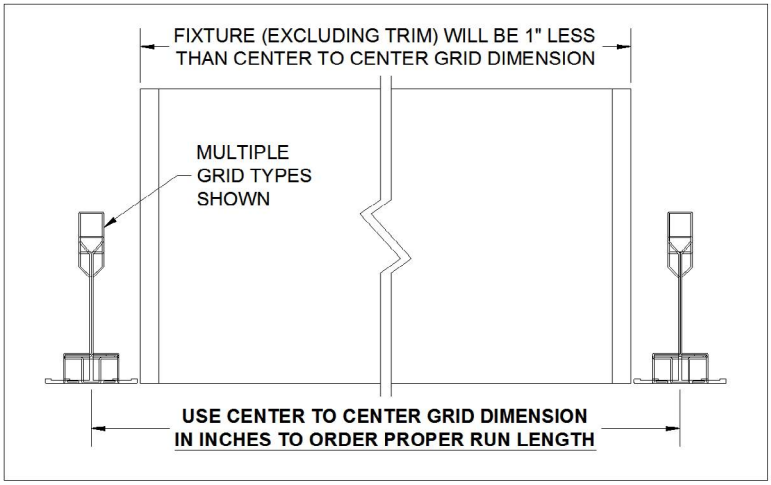


Regressed Satin Diffuser

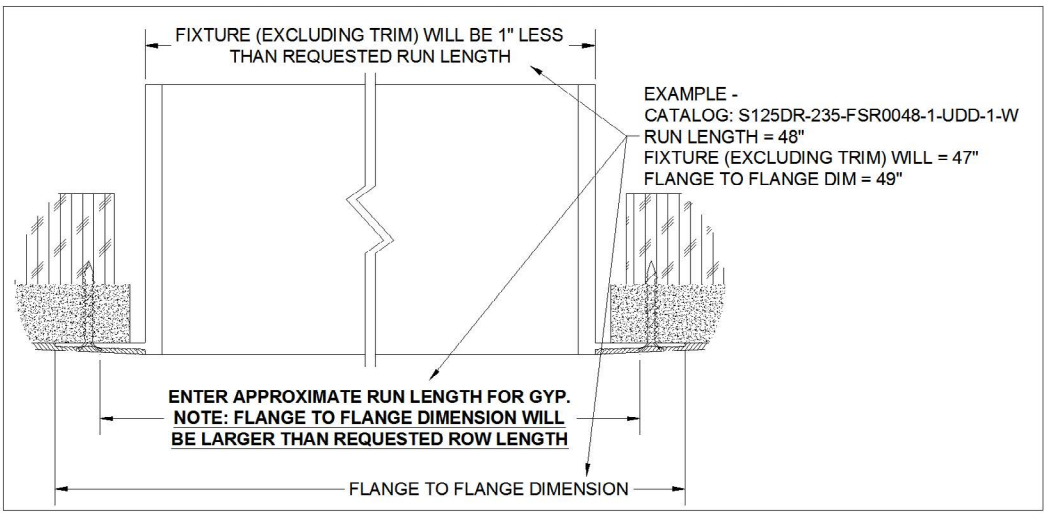


Satin Drop Down Diffuser

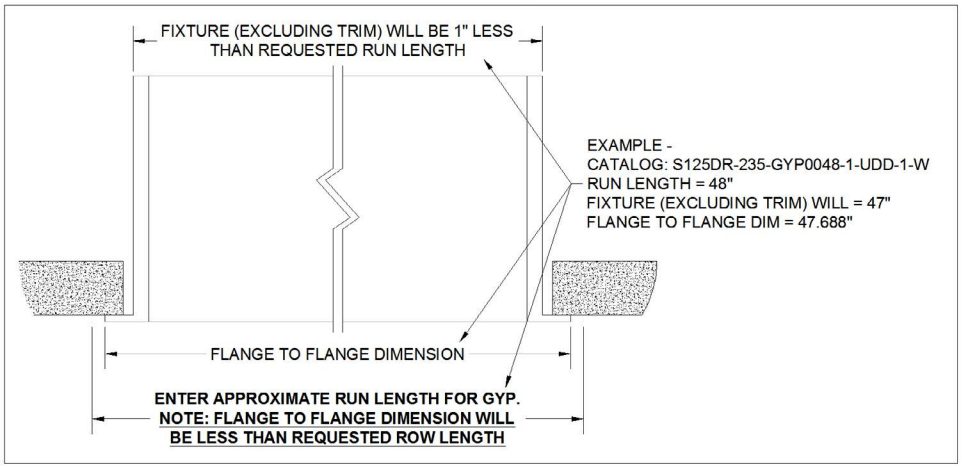
ALL GRIDTYPES SHOWN



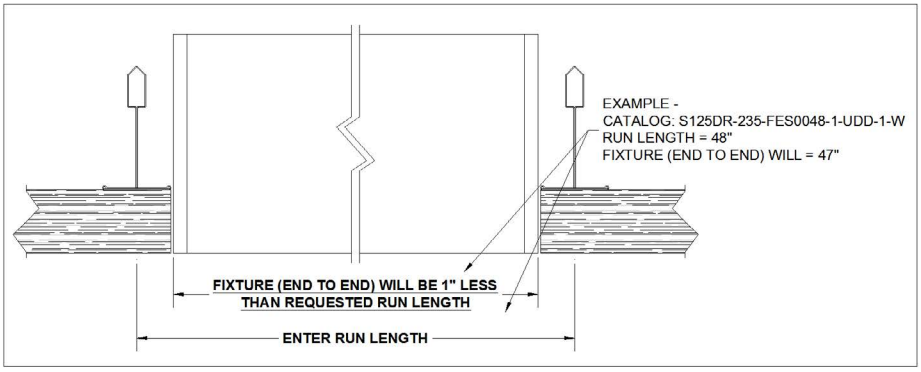
FSR: "FLANGELESS" GYPSUM BOARD



GYP: GYPSUM BOARD

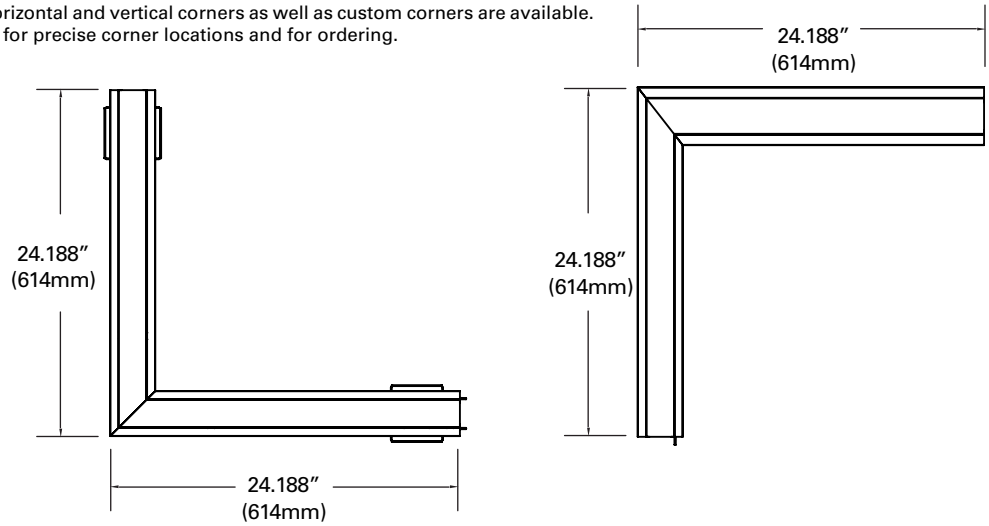


FES: "Finished" Extruded Sides

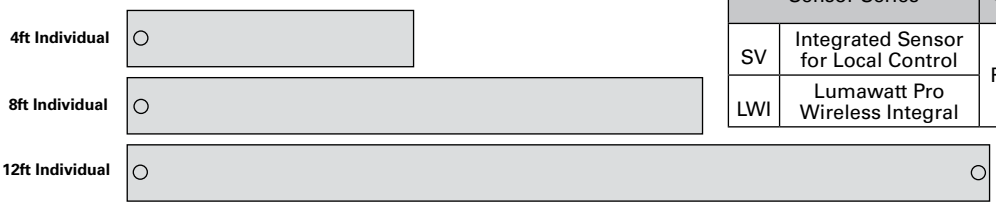


CORNER TRANSITIONS

Standard 90 degree horizontal and vertical corners as well as custom corners are available. Please consult factory for precise corner locations and for ordering.



INTEGRATED SENSOR DETAILS AND PLACEMENT[12]



Sensor Series		Occupancy Technology		Sensing Technology		Coverage Pattern	
SV	Integrated Sensor for Local Control	P	Passive Infrared	D	Dimming Daylight Harvesting (Closed Loop)	1	~144 ft²
LWI	Lumawatt Pro Wireless Integral						

TECHNICAL NOTES

1. Additional lower light levels are available depending on fixture length. For the HCD driver, the requested output must be between 225 Lms/ft and 1030 Lms/ft. Additional drivers and light levels are available - please consult factory for details and lead-time.
2. Not all ceiling types are shown; consult factory for specific ceiling types not listed.
3. All lengths are nominal. Actual sizes are one inch shorter than nominal to allow easy in-grid installation. For Gypsum or Flangeless installations add 1 inch to overall fixture length. Refer to submittal drawings for actual sizes. See "Mounting" details for example.
4. Not all dimming options available for every length; please consult factory for specific details.
5. For configurable runs specify length to nearest inch. Standard runs ship in 12ft increments. Specify 8ft increments if 12ft are too large to receive. Additional charges may apply; please consult factory for details.
6. 347V is achieved using remote transformer.
7. FifthLight DALI is achieved using digital analog converter.
8. Battery pack options are not available in every length; please consult factory for specific details. Battery pack is remote installation only.
9. For all options; consult factory for specific requirements.
10. Asymmetric lens is not available as standard product on regressed housing RDR.
11. Standard product is configured with snap-in lens end caps at the beginning and end of a run or individual fixture. End caps are provided for ease of installation and removal of the lens and eliminate light leak from the end of the fixture when flush satin lens is selected. Please contact factory if lens end-caps are not desired as alternate configurations are available.
12. Integrated LumaWatt Pro Sensor available as standard product in 4ft, 8ft, and 12ft configurations. Continuous runs and alternate lengths are available. Please consult factory for details. One sensor for every 8ft of fixture length. Standard configurations include Universal voltage, single circuit and 'DD' driver selection. Not available with regressed housing or emergency options.
13. Lutron A series drivers are available in light levels LO and 1. For Light level 2, a Lutron TVI is used in conjunction with a DD driver. When a TVI is used, the dimensions of the fixture will be slightly larger on the back side to accommodate the TVI.